NOTE: This disposition is nonprecedential.

## United States Court of Appeals for the Federal Circuit

IMPERIUM IP HOLDINGS (CAYMAN), LTD.,

Plaintiff-Cross-Appellant

v.

SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., SAMSUNG SEMICONDUCTOR, INC.,

 $Defendants ext{-}Appellants$ 

2017-2107, 2017-2133

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Appeals from the United States District Court for the Eastern District of Texas in No. 4:14-cv-00371-ALM, Judge Amos L. Mazzant, III.

Decided: January 31, 2019

ALAN M. FISCH, Fisch Sigler, LLP, Washington, DC, argued for plaintiff-cross-appellant. Also represented by JOHN T. BATTAGLIA, MATTHEW R. BENNER, JEFFREY MATTHEW SALTMAN, ROY WILLIAM SIGLER.

DOUGLAS HALLWARD-DRIEMEIER, Ropes & Gray LLP, Washington, DC, argued for defendants-appellants. Also represented by SAMUEL LAWRENCE BRENNER, COURTNEY

M. COX, Boston, MA; REBECCA R. CARRIZOSA, East Palo Alto, CA; JESSE J. JENNER, STEVEN PEPE, KEVIN JOHN POST, New York, NY.

Before Dyk, O'Malley, and Taranto, *Circuit Judges*. Taranto, *Circuit Judge*.

Imperium IP Holdings (Cayman), Ltd. brought this action in 2014 against Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Semiconductor, Inc. (plus another Samsung entity that has since merged into one of those just named), which we refer to collectively as "Samsung." Imperium alleged that Samsung had infringed and was infringing three Imperium-owned patents: U.S. Patent Nos. 6,271,884; 7,092,029; and 6,836,290. When the case went to trial, the jury found infringement of claims 1, 5, 14, and 17 of the '884 patent and of claims 1, 6, and 7 of the '029 patent, rejected Samsung's invalidity challenges to the claims at issue from those patents, found claim 10 of the '290 patent infringed but invalid, and awarded damages for infringing the '884 and '029 patents.

In post-trial rulings, the district court let the jury's determinations on infringement and invalidity stand. Imperium IP Holdings (Cayman), Ltd. v. Samsung Electronics Co., 259 F. Supp. 3d 530, 537–49 (E.D. Tex. 2017) (Imperium). The court also enhanced damages, Imperium IP Holdings (Cayman), Ltd. v. Samsung Electronics Co., 203 F. Supp. 3d 755, 761–64 (E.D. Tex. 2016) (Enhancement Op.), amended in part, No. 4:14-CV-371, 2017 WL 1716589 (E.D. Tex. Apr. 27, 2017); granted Imperium an ongoing royalty, Imperium IP Holdings (Cayman), Ltd. v. Samsung Electronics Co., No. 4:14-CV-371, 2017 WL 4038884, at \*1 (E.D. Tex. Sept. 13, 2017); and awarded Imperium attorney's fees, Imperium IP Holdings (Cayman), Ltd. v. Samsung Electronics Co., No. 4:14-CV-371,

2018 WL 1602460, at \*1 (E.D. Tex. Apr. 3, 2018); Imperium IP Holdings (Cayman), Ltd. v. Samsung Electronics Co., No. 4:14-CV-371, 2017 WL 4038883, at \*1 (E.D. Tex. Sept. 13, 2017). Samsung appeals on numerous grounds, principally concerning the jury's finding of no anticipation of the claims of the '884 patent found infringed. Imperium cross-appeals to seek, among other things, judgment as a matter of law of non-anticipation of claim 10 of the '290 patent.

We agree with Samsung that the only reasonable finding on this record is that the '884 patent claims at issue here are invalid for anticipation. As for the at-issue claims of the '029 and '290 patents, liability is barred by our separate affirmance of the unpatentability rulings of the Patent and Trademark Office's Patent Trial and Appeal Board regarding those claims. We therefore reverse the judgment of liability against Samsung on the '884 and '029 patents and affirm the judgment against Imperium on the '290 patent.

Ι

## A

The three patents at issue relate to components in digital cameras. The '884 patent is entitled "Image Flicker Reduction with Fluorescent Lighting." The patent claims a method of lighting photographs to reduce the impact of flickering fluorescent lights. '884 patent, col. 6, line 63, through col. 7, line 6. Claim 1 claims:

1. A method of reducing flicker caused by lighting having a periodic intensity using an imager having a pixel integration time, the method comprising the steps of:

setting the integration time to an integral multiple of the period of the periodic intensity of the lighting; determining an amount to vary an overall system gain; and

adjusting the overall system gain by adjusting the integration time while maintaining the integration time at an integral multiple of the period of the periodic intensity.

*Id.* Dependent claim 5 claims "[t]he method of claim 1, wherein the lighting is 60 Hz lighting, and wherein the period of the periodic intensity of the lighting is 8 1/3 ms." *Id.*, col. 7, lines 16–18.

Asserted independent claim 14 is an apparatus claim related to the claim 1 method claim. Claim 14 claims:

14. An imager for a digital camera with reduced flicker caused by lighting having a periodic intensity, the imager providing data for a plurality of pixels, the imager comprising:

programmable integration time circuitry that controls an integration time of the plurality of pixels;

an integration time adjustment block coupled to the programmable integration time circuitry, the integration time adjustment block setting the integration time to an integral multiple of the period of the periodic intensity of the lighting; and

an overall gain control block that adjusts an overall system gain by adjusting the integration time while maintaining the integration time at an integral multiple of the period of the periodic intensity.

*Id.*, col. 7, line 47, through col. 8, line 4. Dependent claim 17 claims

[t]he imager of claim 14, further comprising: an analog, variable gain stage receiving the data for the plurality of pixels and providing amplified analog pixel data; an analog to digital converter receiving the amplified analog pixel data and providing digitized pixel data; and a gamma correction stage receiving the data, and providing scaled pixel data.

Id., col. 8, lines 11-20.

The '029 patent describes and claims methods of adjusting the intensity and duration of the flash used in taking a photograph based on information gathered in a preparatory or preflash stage. '029 patent, col. 11, lines 40–57. The '290 patent describes and claims a data interface circuit that contains, and allows selection between, a single-ended and a differential interface. '290 patent, col. 5, lines 6–18. We need not set out details of those patents here.

В

We have already described the jury verdict and the district court's post-trial rulings. After the jury rendered its verdict, but before the district court's rulings on the

The jury found non-infringement of claim 6 of the '884 patent, but Imperium does not appeal that verdict. Although the jury rejected Samsung's anticipation challenge to claim 6, the district court treated Samsung's post-trial motion seeking judgment as a matter of law on invalidity as not including that claim. See Imperium, 259 F. Supp. 3d at 548. Neither Samsung nor Imperium has argued that we should treat this appeal differently. We treat the judgment regarding the '884 patent, insofar as it is before us on appeal, as covering only claims 1, 5, 14, and 17.

last of Samsung's post-trial motions, the Board determined that the claims of the '290 and the '029 patents asserted in this case by Imperium are unpatentable for obviousness over prior art. Samsung Elecs. Co. v. Imperium (IP) Holdings, No. 2015-01232 (PTAB Dec. 1, 2016) (finding the '029 patent obvious over the prior art); Samsung Elecs. Co. v. Imperium (IP) Holdings, No. 2015-01233 (PTAB Nov. 30, 2016) (finding the '290 patent obvious over the prior art). We have affirmed both Board decisions. Imperium (IP) Holdings v. Samsung Elecs. Co., No. 2017-1570, 2019 WL 140857 (Fed. Cir. Jan. 9, 2019); Imperium (IP) Holdings v. Samsung Elecs. Co., No. 2017-1571, 2019 WL 140950 (Fed. Cir. Jan. 9, 2019).

Samsung appeals on a number of grounds, among them that the record establishes as a matter of law (contrary to the jury verdict) that the infringed claims of the '884 patent are anticipated. Imperium cross-appeals, seeking additional monetary relief and arguing that the record establishes as a matter of law (contrary to the jury verdict) that claim 10 of the '290 patent is not anticipated. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

II

A

We review the denial of judgment as a matter of law de novo and the underlying jury findings for substantial evidence. Bear Ranch, L.L.C. v. Heartbrand Beef, Inc., 885 F.3d 794, 801 (5th Cir. 2018); i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 841 (Fed. Cir. 2010) (following Fifth Circuit law), aff'd on other issues, 564 U.S. 91 (2011); Minn. Mining & Mfg. Co. v. Chemque, Inc., 303 F.3d 1294, 1300 (Fed. Cir. 2002). Judgment as a matter of law rejecting the jury's verdict on a specific issue is justified if the evidence is such that a reasonable jury could not decide that issue as it did. See Fed. R. Civ. P. 50(a); Reeves v. Sanderson Plumbing Prod., Inc., 530 U.S. 133, 149–50 (2000); Raytheon Co. v. Indigo Sys. Corp., 895

F.3d 1333, 1338 (Fed. Cir. 2018) (explaining that, under Fifth Circuit law, judgment is appropriate "where the facts and inferences point so strongly and overwhelmingly in favor of one party that the court concludes that reasonable jurors could not arrive at a contrary verdict") (internal quotation marks omitted).

Here, the dispositive issue is whether, on this record, claims 1, 5, 14, and 17 of the '884 patent must be held invalid for anticipation as a matter of law. We agree with Samsung that a reasonable jury was required on the record of this case to find the claims of the '884 patent at issue to be anticipated by prior art.

The prior-art Johnson patent, U.S. Patent No. 7,289,145, teaches a circuit for processing image data in a digital camera. Johnson, col. 2, lines 3–10. In the specification, Johnson discloses "flickerless modes... to enable indoor operation with fluorescent lights." *Id.*, col. 16, lines 44–46. It also provides a technical description of how the flickerless setting adjusts to operate under flickering fluorescent lighting. *Id.*, col. 16, lines 42–61. That description, together with Johnson's figures, especially Figure 13, teaches altering exposure time by an integral multiple of the cycle of the fluorescent light, changing the time from one cycle to two cycles.

At trial, as Imperium does not dispute, Samsung's expert, Dr. Neikirk provided detailed testimony about how Johnson discloses each of the limitations of claims 1, 5, 14, and 17 of the '884 patent. In particular, he explained that Johnson, including its Figure 13, teaches the "setting the integration time" and "maintaining the integral multiples" claim limitations—which are the only limitations Imperium now argues are missing from Johnson.

On cross-examination, Imperium provided no basis for questioning those conclusions. To the extent that Imperium even mentioned the '884 patent on cross-examination, it did so by asking, "Johnson doesn't say the words 'integration time,' does it . . . ?" J.A. 11994–95. Dr. Neikirk noted that "Johnson uses the term 'shutter,' . . . or 'shutter gain," id., and he had already explained that the terms mean the same thing. J.A. 11836 ("Integration time is the length of time that light is allowed to be gathered by the sensor to form the electrical signal. There's a lot of other terms that get used for that: shutter speed, exposure time, simply shutter — in some cases, shutter gain. All of those terms are used to refer to integration time."). Imperium did not contradict that testimony on

Imperium suggests that its expert, Dr. Wright, offered contrary evidence that the jury could have credited to uphold the '884 patent (the so-called "anti-flicker patent"). But Dr. Wright did not dispute the substance of Dr. Neikirk's testimony. Dr. Wright testified as follows:

cross-examination or otherwise. See In re Gleave, 560 F.3d 1331, 1334 (Fed. Cir. 2009) ("[An anticipatory]

reference need not satisfy an *ipsissimis verbis* test.").

Now, likewise with Johnson, Johnson has very little to do with the anti-flicker patent. If you read the Johnson patent, what it has to do with is it's trying to convert signals from a very atypical CCD [charge coupled device] sensor that has four colors and they're trying to reformat that information into a standard video signal that would have three colors. It's just a reformatter. That's all it's meant for.

Out of over 40 columns of text in that patent, there's one paragraph that even mentions flicker. And in that paragraph—and there's a little figure that goes along with it. Dr. Neikirk showed you that little figure. But that one paragraph of seven sentences, it just talks about, well, you can average the light over one cycle or two cycles of the light variation, and that's really all it says.

And it talks of this flickerless mode in this paragraph. Never says how you're supposed to achieve this flicker mode, how you're supposed to—what kind of equipment it takes to do this. It's very—just kind of in passing. Obviously, wasn't very important to the inventors if they only spent this tiny little paragraph on this big, long patent.

So I don't find that these two prior patents are really close to the anti-flicker patent at all.

## J.A. 12218.

None of this testimony undermines Dr. Neikirk's testimony. The assertion that "Johnson has very, very little to do with the ['884] patent" because it is mostly directed toward another purpose, with only "one paragraph that mentions flicker," is irrelevant. It says nothing whatsoever about the substance of what is in that paragraph in Johnson, or in the associated figures, including Figure 13, discussed in that paragraph, or about how that substance relates to the claim limitations at issue. See MobileMedia Ideas LLC v. Apple Inc., 780 F.3d 1159, 1172-73 (Fed. Cir. 2015) (reversing the denial of judgment as a matter of law where plaintiff's expert offered "only testimony unrelated to the actual limitation" of the relevant claim). In the only sentence in which Dr. Wright refers to the substance of Johnson, he states that Johnson "just talks about, well, you can average the light over one cycle or two cycles of the light variation, and that's really all it says." *Id.* But that testimony is unaccompanied by even an assertion, let alone an explanation, that a '884 claim limitation is missing from Johnson. In fact, Dr. Wright's reference to "one cycle or two cycles" on its face points toward, not away from, teaching the "integral multiple" claim limitation. In short, Dr. Wright's testimony does not contradict any of Dr. Neikirk's testimony.

Juries have wide leeway to assess evidence and credibility. That leeway is reflected, for example, in our rul-

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ings in cases involving conflicting expert testimony. See, e.g., Intellectual Ventures I LLC v. Motorola Mobility LLC, 870 F.3d 1320, 1327 (Fed. Cir. 2017); Edwards Lifesciences AG v. CoreValve, Inc., 699 F.3d 1305, 1313 (Fed. Cir. 2012); see also i4i, 598 F.3d at 850; Ramirez v. Landry's Seafood Inn & Oyster Bar, 280 F.3d 576, 578 n.3 (5th Cir. 2002). And, of course, it is the party attacking the validity of a patent that has the burden of proving invalidity; "that burden of persuasion does not shift at any time to the patent owner." TP Labs., Inc. v. Prof'l Positioners, Inc., 724 F.2d 965, 971 (Fed. Cir. 1984). But under the requirement of substantial evidence, a jury's rejection of expert testimony must have some reasonable basis.

That is why the Supreme Court has held that, in ruling on a motion for judgment as a matter of law, "the court should give credence to the evidence favoring the nonmovant as well as that evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that that evidence comes from disinterested witnesses." Reeves, 530 U.S. at 151 (internal quotation marks omitted); see also Chesapeake & Ohio Ry. Co. v. Martin, 283 U.S. 209, 216 (1931). Similarly, under Fifth Circuit precedent, the jurors as "the trier of fact [are] not ... at liberty to disregard arbitrarily the unequivocal, uncontradicted and unimpeached testimony of an expert witness where...the testimony bears on technical questions of medical causation beyond the competence of lay determination." Webster v. Offshore Food Serv., Inc., 434 F.2d 1191, 1193 (5th Cir. 1970) (internal citation omitted); see also NewCSI, Inc. v. Staffing 360 Solutions, Inc., 865 F.3d 251, 257 (5th Cir. 2017); Quinn v. Sw. Wood Prods., Inc., 597 F.2d 1018, 1024 (5th Cir. 1979) (applying principle where defendant's expert presented the only testimony on a crucial technical point, explaining that "it has been held that such testimony, even by an employee of a party, must be taken as true where it was candid, the witness was not impeached, his

credibility was not questioned, and his testimony was not controverted although, if inaccurate, it could readily have been shown to be so").

In this case, the jury's finding lacks any reasonable basis. As we have recounted, Dr. Neikirk gave straightforward, detailed testimony that Johnson taught all the limitations of the claims at issue, and the cited portions of Johnson provide support for that testimony that is on its face strong. This testimony was not contradicted.

Nor was Dr. Neikirk impeached. Imperium has not identified any inconsistency or equivocation in Dr. Neikirk's testimony; nor has it pointed to any other reason the jury could reasonably have rejected his testimony. At oral argument in this court, Imperium noted that Dr. Neikirk worked with one of the Johnson patent's ten coinventors when that co-inventor was a graduate student. But in its main brief responding to Samsung's argument about the '884 patent, Imperium did not identify that fact as a basis for the jury to disbelieve Dr. Neikirk. Principal and Response Brief of Imperium at 29–33. On this record, the prior work together, standing alone, is not enough for a reasonable jury to disbelieve Dr. Neikirk. Cf. Chesapeake & Ohio Ry. Co., 283 U.S. at 216 ("The witness was not impeached; and there is nothing in the record which reflects unfavorably upon his credibility. The only possible ground for submitting the question to the jury as one of fact was that the witness was an employee of the petitioner. In the circumstances above detailed, we are of opinion that this was not enough to take the question to the jury, and that the court should have so held."); Quinn, 597 F.2d at 1024 (similar conclusion even though expert was an employee of the defendant).

On the evidence in this record, we hold, the jury could not properly find that the claims of the '884 patent at issue here are not anticipated. The liability judgment 12

against Samsung based on the '884 patent therefore must be reversed.

В

The liability judgment against Samsung in this case also rested on certain claims of the '029 patent, and Imperium seeks, in its cross-appeal, to establish liability as a matter of law based on claim 10 of the '290 patent (which the jury determined to be invalid). But we have affirmed the Board's determinations that those claims are unpatentable. Liability based on those claims, therefore, is now precluded. *See Fresenius USA*, *Inc. v. Baxter Int'l, Inc.*, 721 F.3d 1330, 1339 (Fed. Cir. 2013). We must reverse the judgment of liability based on the '029 patent and reject Imperium's argument for liability based on the '290 patent.

We need not reach any of the remaining issues presented on the appeal and cross-appeal, all of which are mooted by the reversal of liability.

III

The judgment against Samsung on the '884 patent and the '029 patent is reversed. The judgment against Imperium on the '290 patent is affirmed.

Costs to Samsung.

REVERSED IN PART, AFFIRMED IN PART